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WINTER et al. S.N. 09/868,333

Atty. Docket No. 6002-1032

PATENTS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Josef WINTER et al.

Confirmation No. 8909

Serial No. 09/868,333

GROUP 1723

Filed June 18, 2001

Examiner Marianne S. Ocampo

A FILTER CARTRIDGE AND PROCESS

DECLARATION UNDER RULE 132

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

I, Kenneth Gordon Mortenson, one of the named inventors in WO 97/19737 to Lindberg et al. (the "Lindberg Patent"), am a citizen of Australia, residing at Cedar Creek, Queensland Australia, declare as follows:

I am familiar with the above-identified U.S. patent application and with the "Lindberg Patent".

As noted on the face of the Lindberg Patent, the assignee of that patent is Filter Technology International PTY, LTD. Mr. Lindberg and myself are former co-workers.

Mr. Lindberg had initially designed a metal ribbed canister as described in Australian Patent No. 650,176. This canister was manufactured and sold by Filter 2000. It was a successful product. Prior to the ribbed canister tracking of oil along the wall was a significant problem. This was reduced by the ribs. The ribs were formed by displacing the

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metal of the can out of the plane of the side wall so the overall width of the ribs was about 8mm. This meant that the paper was displaced 8mm. While this was effective in reducing tracking it did not stop tracking under heavy load. The metal canister had other disadvantages and Lindberg and myself set out to develop a plastics canister which we hoped would overcome those disadvantages and provide a basis for recycling the canisters. The disadvantages of the metal canister are described in the Lindberg Patent and in the present application.

The drawings in the Lindberg Patent are based on original drawings made by me. In particular the cross-section of all the drawings was taken from my original drawings. Those drawings were based on my experience with the metal canister. The oil filter of Figure 3 of the Lindberg Patent has three sets of ribs, a set at the top a set at the bottom and a set in the middle with two ribs in each set. The metal canister had ribs that were centrally placed so the distribution of ribs in the Lindberg patent were quite different to the metal canister. We changed the distribution of ribs because we felt it would improve anti-tracking. We put ribs at the top and bottom because we felt that by applying more pressure at the top and bottom would reduce the tracking problem we had at higher loads. However, the size was the same as in the metal canister simply because in my experience this was required. The new distribution of ribs was never tested because the canister in the Lindberg Patent was never made.

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Mr. Lindberg and myself brought to Mr. Winter and Mr. Krelle, the inventors in the above-identified application, the metal canister and my drawings subject of the Lindberg patent with a view to reproducing that canister or the canister of the Lindberg patent in plastic.

The design in the Lindberg Patent was influenced by the rib structure of the metal canister. Lindberg and myself thought that effective anti-tracking required relatively large ribs.

Mr Lindberg and myself took a sample of the metal canister and our design ideas including that of the Lindberg Patent to Mr Winter and Mr Krelle to make a tool to produce a plastic canister based on our ideas. Mr Winter and Mr Krelle advised that they were not able to produce a canister to our design in plastic, they proposed the canister of the present application and suggested the canister of the present application on the basis that with their design higher paper compression could be tolerated and the new rib structure they proposed may be effective.

Mr. Winter and Krelle developed the present process to make canisters as disclosed in the above-identified application ("the Winter/Krelle design"). However, the original design of Mr. Lindberg and myself subject of the Lindberg Patent could not be made by this process due to the rib structure. A disclosure of the disadvantages of the Lindberg Patent is set forth on pages 2 and 3 of the present specification.

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Mr. Lindberg and myself perceived that we needed ribs having a same depth as the metal canister but we were not certain this would work and the Winter/Krelle design also did away with the top and bottom ribs of the Lindberg Patent. To me this was uncharted territory because we were trying to predict the effects of oil flow at pressures at pressures up to 100psi and at varying levels of contamination. The ribs proposed by Mr. Winter and Mr Krelle for manufacturing purposes were substantially less than Mr Lindberg's and my design and more ribs were employed and as it has now turned out this has proved effective.

It is correct to say that the canister of the Lindberg patent is a different canister to that described and claimed in the present application simply because it could not be made by the process described in the present application. In addition the success of the Winter/Krelle design was completely unexpected because the rib structure used was contrary to the accepted thinking at the time.

It should be noted that there are no dimensions given in the Lindberg Patent but the canister is designed to fit inside known oil and fuel housings and if the skilled person were to scale the drawings accordingly the rib size is clearly much greater than in the canister of the abovementioned patent application.

Accordingly, the assertion noted in the Official Action of August 25, 2003 regarding claim 5 that it would be

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obvious to one of ordinary skill in the art to modify the height/projection of the ribs to result in enough spacing that the canister could be easily removed from the mold and still inhibit tracking was not obvious to Mr. Lindberg and myself and could not be considered obvious to one of ordinary skill in the art.

The method underlying the present invention could not make the product of the Lindberg Patent because the depth of the ribs of the Lindberg Patent is too great. Accordingly, one of ordinary skill in the art having the Lindberg Patent before him would not choose ribs that project at 1 mm to 2 mm as recited in claim 5 of the present application.

Therefore, the present invention is believed sufficiently distinguished over the Lindberg Patent.

Furthermore the assertion in Paragraph 21 of the Official Action dated 29 January 2004 is incorrect since the drawings taken to scale result in ribs that are large and are clearly much larger than 1-2mm.

It should also be noted that an essential requirement of the canister in the Lindberg Patent is the greater depth, the paired rib sets and ribs at top and bottom. There would be no reason for the skilled person to modify that design to produce the Winter/Krelle design and indeed based on experience the skilled person would not expect the Winter/Krelle design to work so there is a

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significant disincentive to the invention claimed in the present application.

Accordingly, the assertion at page 3 of the official Action dated 29 January 2004 that the distance is dependent on the user/manufacture is incorrect because the user/manufacture would have based the distance on the known distances that were expected to give the desired anti-tracking not on the dictates of the manufacturing process and as mentioned above would have not necessarily expected the Winter/Krelle design to be effective.

It should be noted that the anti-tracking function of the rib structure in the Lindberg Patent and the present application are quite different. Although they both use ribs the major influence in the Lindberg Patent is from the ribs impinging on the paper to deform the paper (which was also the case in the metal canister) whereas in the present application it is the paper impinging on the ribs. There is clearly less deformation of the paper in the present application and consequently the paper can be wound tighter and pushed into the canister at greater pressure than in the case of larger ribs. This is an observation in hindsight but serves to illustrate the flawed arguments and oversimplification of the analysis in the Official Action which generalises in support of the rejection.

Consequently, the general assertion of the official Action dated 29 January 2004 that the performance

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of the two canisters is the same fails to take into account the different relationship and different physical effect of each canister to the paper roll. The performance of the two canisters is clearly different simply because the larger the ribs the more difficult it is to press the roll into the canister for any given roll density.

The undersigned declares further that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under §1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Declarant's signature


Kenneth Gordon MORTENSON

Date

May 13, 2004